

CLAIMS

1. Braking system for electrically driven motor vehicles wherein it contains at least one electrically actuated service brake (5) and at least one motor brake.
2. Braking system according to claim 1, wherein the control unit (7) of the electrically actuated service brake (5) is directly incorporated into the motor vehicle control unit or the motor control unit (6).
3. Braking system according to claim 2, wherein the motor control unit (6) and the brake control unit (7) are spatially integrated into one apparatus.
4. Braking system according to claim 2, wherein the motor control unit (6) and the brake control unit (7) are connected with each other through a bus system.
5. Braking system according to one of the preceding claims, wherein the characteristic curve between pedal force or pedal path and braking force can be influenced in the control unit (7).
6. Braking system according to one of the preceding claims, wherein a mechanical or hydraulic emergency braking system or emergency actuation system is incorporated into the braking system as an underlying unit.
7. Braking system according to one of the preceding claims, wherein the electrically actuated brake (5) additionally acts as a parking brake.
8. Braking system according to one of the preceding claims, wherein actuators actuating electromagnetically, through electric motors or piezo-electrically can be used as braking actuators for the electrically actuated brake (5).
9. Method for operating a braking system for electrically driven motor vehicles which contains at least one electrically actuated brake (5) as a service brake, especially a braking system according to one of claims 1 through 8, wherein the most effective combination of electric motor brakes and service brakes is ascertained by the brake management unit or the brake control unit (7).
10. Method according to claim 9, wherein a position/rotational speed sensor (8) is used for each electric motor (2) whose information is forwarded to the brake management unit or the brake control unit (7) for evaluation of the braking action, wherein the electrically actuated service brake (5) is controlled as a function

of the braking action of the electric motor (2) or the electric motors ascertained by the brake control unit (7) and the specification on the part of the driver input through an activation of the brake pedal (9) or a brake lever.

11. Method according to claim 10 or 11, wherein the braking force assumes, time-controlled or event-controlled, a specified value in the event of a drop in electric energy.

12. Braking system according to one of the preceding claims, wherein the parking brake closed without current is bled with current while the service brake acts in the same manner or is also bled without current and closed with current.